
MITRE DOURADO, Universidade Federal do Rio de Janeiro

Complexity aspects of graph convexity

In this talk we discuss characterizations, bounds, polynomial time algorithms, and NP-hardness results in some graph convexities concerning the determination of the parameters hull number, geodetic number, and convexity number for general graphs and some graph classes. The considered convexities are those in which the convex sets are defined by shortest paths, induced paths, paths of length three, Steiner sets, and alliances.